

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 13 (Canceled).

Claim 14 (Currently Amended): A radial piston pump ~~(1)~~ for high-pressure fuel generation in fuel injection systems of internal combustion engines, ~~in particular in a common rail injection system,~~ having a drive shaft ~~(4)~~ which is mounted in a pump casing ~~(2)~~ and has an eccentric shaft section ~~(6)~~ on which a running roller ~~(8)~~ is mounted, and having preferably a plurality of pistons ~~(16)~~, which are arranged in a respective cylinder ~~(14)~~ radially with respect to the drive shaft ~~(4)~~ and each have a piston footplate ~~(18)~~, which makes contact with the circumferential surface ~~(10, 12)~~ of the running roller ~~(8)~~, at their ends facing the running roller ~~(8)~~, wherein a surface ~~(28, 31)~~ of the piston footplate ~~(18)~~ which is in contact with the circumferential surface ~~(10, 12)~~ of the running roller ~~(8)~~ has at least one insert ~~(30)~~ made from a wear-resistant material, ~~namely~~

~~of comprising~~ hard metal, a ceramic material, a cast carbide material or cermet, and/or in that at least part of the running roller (8), ~~in particular at least part of the circumferential surface (10, 12) of the running roller (8)~~, consists of a wear-resistant material, ~~namely of~~ comprising hard metal, a sintered tool steel or an alloyed nitriding steel.

Claim 15 (Currently Amended): The radial piston pump as claimed in claim 1, wherein the piston ~~(16)~~ consists of a ceramic material.

Claim 16 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the running roller ~~(8)~~ consists of a heat-treated steel and has inserts ~~(32)~~ made from hard metal, ~~such as G20, GC37 or GC20, and in that~~ wherein the piston footplate ~~(18)~~ has inserts ~~(30)~~ made from ceramic, ~~such as Si₃N₄, ceramic, from chilled cast iron, such as FeGGH, or from cermet.~~

Claim 17 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the running roller ~~(8)~~ consists of a precision-cast material, ~~such as GX 210WCr13 H, and in that~~

wherein the piston footplate ~~(18)~~ has inserts ~~(30)~~ made from ceramic, ~~such as Si₃N₄ ceramic,~~ from hard metal, ~~such as G20,~~ or from cermet.

Claim 18 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the running roller ~~(8)~~ consists of a cast carbide material, ~~such as chilled cast iron SeGGH, and in that~~ and wherein the piston footplate ~~(18)~~ has inserts ~~(30)~~ made from ceramic, ~~such as Si₃N₄ ceramic,~~ from hard metal, ~~such as G20,~~ or from cermet.

Claim 19 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the running roller ~~(8)~~ consists of sintered tool steel, ~~such as ASP23,~~ or of an alloyed nitriding steel, and ~~in that~~ wherein the piston footplate ~~(18)~~ has inserts ~~(30)~~ made from ceramic, ~~such as Si₃N₄ ceramic,~~ from hard metal, ~~such as G20,~~ from cermet or from a cast carbide material, ~~such as SeGGH.~~

Claim 20 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the alloyed nitriding steel contains

at least one of C_L and/or Cr_L and/or V and/or and Mo, is gas-nitrided and does not have a compound layer in the region of contact with the piston footplate ~~(18)~~.

Claim 21 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the running roller ~~(8)~~, on its circumferential surface ~~(10, 12)~~, has at least one insert ~~(32)~~ made from the respective wear-resistant material.

Claim 22 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the running roller ~~(8)~~, on its circumferential surface ~~(12)~~, has at least one transverse groove ~~(36)~~ extending transversely to the direction of movement.

Claim 23 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the piston footplate ~~(18)~~ has at least two grooves ~~(50)~~ which cross one another on its surface ~~(31)~~ facing the running roller ~~(8)~~.

Claim 24 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the surface of the piston footplate

~~(18)~~ and/or of the running roller ~~(8)~~ has a surface roughness R_z of between 0.15 μm and 2 μm .

Claim 25 (Previously Presented): The radial piston pump as claimed in claim 14, wherein the piston consists of an Si_3N_4 ceramic or a ZrO_2 ceramic.

Claim 26 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the piston ~~(16)~~ is produced by extrusion and has a porosity of less than 5%, the surface being infiltrated with MoS_2 .

Claim 27 (Currently Amended): The radial piston pump as claimed in claim 14, wherein the piston ~~(16)~~ is isostatically extruded and sintered.